Application No.: 09/546,981 Docket No.: 20421-00061

LIST OF CLAIMS

1. (Currently amended) In a network switch comprising a control point and a plurality of network processors, a method comprising:

(a) receiving data frames from a network; and

(b) performing logical bridging of data frames destined for or originating from said control point in a network processor directly connected to said control point, said network processor further comprising an L2 table and a media access control (MAC) address database.

2. (Original) The method of claim 1, said step (b) comprising:

(c) determining whether said data frame is destined for said control point; and

(d) sending said data frame to said network processor directly connected to said control point when said step (c) indicates that said data frame is destined for said control point.

3. (Original) The method of claim 2, said step (c) comprising:

(e) looking up a destination address in said frame in a media access control (MAC) address database;

(f) sending said data frame to a logical router when said look-up determines that said data frame requires processing by a logical router;

(g) looking up a destination address in a routing table in said logical router; and

(h) sending said frame to said network processor directly connected to said control point when said look-up determines that said frame is destined for said control point.

4. (Original) The method of claim 3, further comprising:

setting a bit in a frame header appended to said frame to indicate that said frame is destined for said control point.

5. (Original) The method of claim 1, said step (b) comprising:

learning a source MAC address in said frame in a MAC address database; and

sending said frame to said control point.

6. (Original) The method of claim 1, said step (b) comprising:

looking up a destination address in a frame originating from said control point in a MAC address database; and

forwarding said frame to a target network processor and port found in said look-up.

7. (Currently amended) A network switch comprising:

a control point;

a plurality of network processors;

said plurality of network processors programmed with logical bridging and logical routing functions;

wherein a network processor directly connected to said control point performs logical bridging functions needed by said control point, said network processor further comprising an L2 table and a media access control (MAC) address database.

8. (Original) The network switch of claim 7, wherein said logical bridging and logical routing functions determine that an incoming data frame to one of said plurality of networks processors is destined for said control point and send said data frame to said network processor directly connected to said control point.

9. (Original) The network switch of claim 8, wherein said logical bridging function in said network processor directly connected to said control point learns a source address in said frame in a MAC address database.

10. (Original) The network switch of claim 9, wherein said logical bridging function in said network processor directly connected to said control point receives a frame originating from said control point, looks up said learned source address, and forwards said frame originating from said control point to a target network processor corresponding to said learned source address.

11. (Currently amended) A computer-usable medium storing computer executable instructions, said instructions when executed by processors in a network switch comprising a control point and a plurality of network processors, implementing a method comprising:

(a) receiving data frames from a network; and

(b) performing logical bridging of data frames destined for or originating from said control point in a network processor directly connected to said control point, said network processor further comprising an L2 table and a media access control (MAC) address database.

12. (Original) The computer-usable medium of claim 11, said step (b) 2 comprising:

(c) determining whether said data frame is destined for said control point; and

(d) sending said data frame to said network processor directly connected to said control point when said step (c) indicates that said data frame is destined for said control point.

13. (Original) The computer-usable medium of claim 12, said step (c) comprising:

(e) looking up destination address in said frame in a media access control (MAC) address database;

(f) sending said data frame to a logical router when said look-up determines that said data frame requires processing by a logical router;

(g) looking up a destination address in a routing table in said logical router; and

(h) sending said frame to said network processor directly connected to said control point when said look-up determines that said frame is destined for said control point.

14. (Original) The computer-usable medium of claim 13, said method further comprising: setting a bit in a frame header appended to said frame to indicate that said frame is destined for said control point.

15. (Original) The computer-usable medium of claim 11, said step (b) comprising:

learning a source MAC address in said frame in a MAC address database; and sending said frame to said control point.

16. (Original) The computer-usable medium of claim 11, said step (b) comprising: looking up a destination address in a frame originating from said control point in a MAC address database; and forwarding said frame to a target network processor and port found in said look-up.